STANDARDS FOR WATER EFFICIENT PLUMBING PRODUCTS

The Sanitary Appliances and Water Fittings Sectional Committee, CED 03 of the Civil Engineering Department (CED) of Bureau of Indian Standards (BIS) formulates Indian Standards covering the area of sanitarywares [such as Water-Closets, Flusing Cisterns, Bath Tubs, Traps, Urinals, Waste Plugs and Accessories for wash basins, manhole covers for use in drainage works (except concrete)] and Water Fittings (Such as Taps and Valves, Ball Valves, Copper and Plastic Floats for Ball Valves, Ferrules, Bib Cocks, Ferrules, faucets, showerheads).

Since its inception, CED 03 has formulated 71 Indian Standards, out of which, there are 68 **Product Specification,** 1 **Code of Practice and** 2 **Methods of Test** standards**.** These standards cover various technical requirements for the above mentioned plumbing products.

Plumbing systems used in the country are mainly based on water carriage system, where water is used as media for sanitizing and operation in sanitaryware and sanitary fittings. Due to increased problems of water scarcity and to reduce unnecessary wastage of water, it is very important to make these products water efficient. Keeping in view of this growing need, CED 03 has formulated two new Indian Standards as given below:

a) **IS 17650 (Part 1) : 2021** Water efficient plumbing products **—** Requirements: Part 1 Sanitaryware
b) **IS 17650 (Part 2) : 2021** Water efficient plumbing products **—** Requirements: Part 2 Sanitary fittings

The standards, IS 17650 (Part 1) and IS 17650 (Part 2) cover additional requirements for assessment and water efficiency rating of the sanitarywares (such as water closets, squatting pans, flush valves, flushing cisterns and urinals) and sanitary fittings [such as faucets (taps) and showerheads] for their performance based on water efficiency.

These standards will provide three types of water efficiency ratings namely, as 1 star, 2 star and 3 star; higher the number of stars, better would be the water efficiency rating of the product.

With the publication of these standards, not only BIS certification for quality(ISI Mark) but also the star rating of water efficient plumbing products would be possible. It is expected that the industries would opt for and comply with the provisions of these two standards for manufacturing various such plumbing products to conserve water. Consumers, on the other hand, will also become sensitized towards the need for using water efficient plumbing products.

The following standards have also been revised/formulated to incorporate various technological advancements, including reference to water efficiency aspects, wherever required:

1) **IS 2556 (Part 1)**: **2021** Vitreous China Sanitary Appliances — Specification Part 1 General Requirements (Fourth Revision)
2) **IS 2556 (Part 6): 2021** Vitreous China Sanitary Appliances — Specification Part 6 Specific Requirements of Urinals and Partition Plates (Fifth Revision)
3) **IS 2556 (Part 8): 2021** Vitreous China Sanitary Appliances — Specification Part 8 Specific Requirements of Close-Coupled and One-Piece Pedestal Washdown and Syphonic Water Closets (Sixth Revision)
4) **IS 774: 2021** Ceramic Vitreous China Flushing Cisterns for Water Closets and Urinals — Specification
5) **IS 7231: 2021** Plastic Flushing Cisterns for Water Closets and Urinals — Specification
6) **IS 8931: 2021** Copper Alloy Single Taps, Stop Valves, Combination Tap Assembly and Single Lever Mixers for Water Services — Specification
7) **IS 12234: 2021** Plastic equilibrium Float Valves for Cold Water Services — Specification
8) **IS 17585: 2021** Beta (Outflow) Valves for Gravity Type Flushing Cisterns — Specification

The plumbing industry, various works departments, builders/developers, organized and common consumers should use plumbing products as per these standards to promote water efficiency and sustainable development.